H: India G-4, 5 (1960-1961) 1962 AWII Kerala AWII

5.5 The average annual landing of marine (coastal) fish is estimated at 260,000 tons (35% of the all-India output) and the gross value of marine catches at Rs. 6.5 crores.

5.6 The catches from coastal waters comprise such commercially important species of fish as Sardines (20%), Prawns (13%), Mackerel (11%), Sharks (5%), Silverbellies (4%), Horse Mackerel (4%), Sole (3%) and Ribbon fish (3%). According to a sample survey conducted by the ICAR in Travancore-Cochin area, about 61 per cent of the total landings are consumed in fresh condition and the remaining part is utilized in various fish-based industries. (An alternative estimate by the State Fisheries Department puts the ratio as fifty-fifty.)

5.7 Dug-out, plank-built canoes and catamarans are the main types of crafts employed for fishing. Dug-out canoes are more popular throughout the State. Boat seines, gill nets, lines and hooks, coast nets and shore seines are the important tackle used in Kerala. Drift nets are used for catching Sardines, Mackerels and Sharks while long lines are sometimes employed for exploiting Horse Mackerels and Shark fisheries.

5.8 During the last decade efforts have been made to introduce mechanized fishing in order to raise the outturn and improve per capita income of the fishermen. Experiments for mechanizing indigenous boats and introducing suitable new types of mechanized crafts have been carried out in the State with the help of FAO experts and the Indo-Norwegian Project. However, unlike Maharashtra, Kerala has made very little progresss in mechanizing its fishing activity. This is mainly explained by the fact that the indigenous crafts in use in Kerala at present, have been found unsuitable for the installation of engines. Thus, to introduce mechanized boats, new boats have to be designed and constructed. As a result of a number of investigations and trials, a few small mechanized boats, ranging from 20 to 26 feet in length, have been recently introduced in the State. The Indo-Norwegian Project has so far issued 88 mechanized boats to the fishermen who completed training with the project. In addition to these, the State Fisheries Department has also issued 39 mechanized vessels. Of these, 25 have been issued to fishermen; of the rest, some are operated by the Department at training centres for transportation of fish and some still remain idle.

5.9 In Kerala, as in some other marine States of India, mechanized boats are issued at subsidized rates to fishermen's cooperatives, groups of fishermen and to trainees who have been trained at one of the two Training Centres in the State. The quantum of subsidies is in line with the all-India pattern, that is, 50 per cent of the cost of engine, 25 per cent of the cost of hull and 33⅓ per cent on that of fishing nets and gears.[1]

5.10 The Indo-Norwegian Project is playing an important role in the development of fisheries in Kerala. The project aims at the improvement of socio-economic conditions of the fishermen. The programme envisages an increase in the production of fish as well as the earnings of the fishermen, improved handling and distribution of catches, the promotion of cooperative activities, and better sanitation and living conditions in the fishermen's villages. The project has also undertaken the supply of fish to the interior areas of the State. It provides most of the basic requirements of

[1] The Indo-Norwegian Project issued nets and gear on 80 per cent and hull and engine on 50 per cent subsidy in the beginning.

11: India G-4, 5 (1960-1961) 1962 AWll Kerala AWll

5.16 Chinese nets and stake-nets are the most important type of tackles used in the backwaters. There are about 1,180 Chinese nets and 5,400 stake-nets operating in the State. These nets are registered on payment of an annual licence fee assessed on them.

5.17 A large area of low lying paddy fields adjacent to the backwaters is used for prawn culture. The whole area is enclosed with earthern embankments (5 to 6 feet high) provided with sluice boxes for regulating the flow of water. Prawn culture in paddy fields is done on an extensive scale in Ernakulam and Trichur districts. Cultivation in these fields is restricted to a single crop lasting from July to September. The fishing operations in these fields extend from October upto the middle of April. Fishing is done with bag nets, scoop nets and drag nets. The fields are grouped into three classes on the basis of productivity. The average yields per square mile per annum from I, II and III Class are estimated at 1,080 lbs., 680 lbs. and 330 lbs. respectively. The area under the three classes are shown in Table 26.

5.18 About 80 per cent of the catches consist of prawns. On a modest estimate, the total production of prawns from these fields would be of the order of 4,000 tons. The rest of the catch consists of Mullets, Pearlspot, etc. Most of the prawns caught from the fields are cured and exported to the other States in India, Burma and Ceylon.

5.19 There are three brackish water fish farms in the State, one each at Mallapuram, Narakal and Ayiramthenga. The individual areas of these farms are 52.5, 42.5 and 22 acres respectively. An additional area of 28 acres is being converted into a farm at Ayiramthenga. Two more farms with a total area of 64 acres are also to be established.

River Fisheries

5.20 The river fisheries in Kerala are very poorly developed. Out of some 44 rivers traversing the State, only four, viz., Bharathapuzha, Periyar, Pamba and Beypore are more than 100 miles long. The more important fresh-water fish belong to the *Barbus* and Cat fish species.

5.21 There is no systematic fishing in the rivers and only a small number of fishermen are dependent on riverine fisheries. Fishing in the rivers is taken up as a hobby by the local people and the catches are utilized for domestic consumption. No data on production and the number of persons engaged are available in regard to river fisheries.

Culture Fisheries

5.22 There are a number of tanks, ponds and reservoirs in Kerala, covering an area of about 6,000 acres, However, the area suitable for fish culture is much less than this. A recent survey of culture fisheries shows that only about 260 acres out of a total area of 1,227 acres surveyed in Trivandrum, Quilon and Alleppey districts are suitable for fish culture.